

FAILURE PROTECTION IN A COMMUNICATIONS NETWORK**ABSTRACT**

A communications packet network comprises a plurality of nodes interconnected by communication links and in which tunnels are defined for the transport of high quality of service traffic. The network has a set of primary traffic paths for carrying traffic and a set of pre-positioned recovery (protection) traffic paths for carrying traffic in the event of a fault affecting one or more the primary paths. The network incorporates a fault recovery mechanism. In the event of a fault, traffic is switched temporarily to a recovery path. The network then determines a new set of primary and recovery paths taking account of the fault. The traffic is then switched to the new primary paths. The new recovery paths provide protection paths in the event of a further fault. The network nodes at the two ends of a recovery path exchange information over that path so that packets returning to the main path present labels that are recognisable for further routing of those packets.